

CLAIMS:

1. A method for reducing a number of events presented in an event list to a user by a network management system, which events are generated by the network management system during the monitoring of a network and may be due to rebooting of a device on the network, the method comprising:

5 receiving an event relating to a device;

determining whether a more significant event already appears in the event list relating to the device, and

10 if so, preventing the received event from being presented in the event list to the user.

2. A method as claimed in claim 1, wherein the events are assigned a priority value according to the type of event, the priority value indicative of the relative significance of the event, and the step of determining comprises comparing the priority value of the received event with the priority value of existing events in the event list to determine whether a more significant event already appears in the event list.

15 3. A method as claimed in claim 2, wherein the priority value of the most significant event in the event list is stored in memory, and the step of comparing comprises comparing the priority value of the received event with the priority value in memory.

20 4. A method as claimed in claim 3, wherein the events comprise potential causal events, which may be a most significant event, and side effect events which are of lesser significance.

25 5. A method as claimed in claim 4, wherein, if a potential causal event is received, the method prevents received side effect events from being presented in the event list for a time interval.

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6. A method as claimed in claim 5, wherein the time interval includes a time period prior to a time of the potential causal event.

7. A method as claimed in claim 4, wherein:

the potential causal events include events which are generated as a result of receiving a Warm/Cold Start Up Trap from the device or failure of the device to respond to IP Ping, and

the side effect events are events which are generated as a result of receiving a Link Up Trap or a Link Down Trap for a link connected to the device.

8. A method as claimed in claim 7, wherein potential causal events which are generated as a result of receiving a Warm/Cold Start Up Trap are more significant, and are assigned a lower priority value, than potential causal events generated as a result of failure of the device to respond to IP Ping.

9. A method as claimed in claim 7, wherein the potential causal events further include events generated as a result of a configuration message indicating that configuration of the device has started.

10. A method as claimed in claim 9, wherein potential causal events generated as a result of a configuration message indicating that configuration of the device has started are more significant, and are assigned a lower priority value, than potential causal events which are generated as a result of receiving a Warm/Cold Start Up Trap.

11. A method as claimed in claim 4, further comprising, after the step of receiving the event, considering whether the event is a potential causal event, and if so, starting a timer running for a time period, and presenting the event in the event list.

12. A method as claimed in claim 11, further comprising, preventing any further side effect events received whilst the timer is running from being presented in the event list.

13. A method as claimed in claim 11, wherein, after the step of presenting, if a new potential causal event is received whilst the timer is running which is more significant than the event presented in the presenting step, the method further comprises the step of replacing the presented event with the new event.

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14. A method as claimed in claim 11, wherein, after the step of presenting, if a new potential causal event is received whilst the timer is running which is less significant than the event presented in the presenting step, the method further comprises the step of preventing the new event from appearing in the event list.

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15. A method as claimed in claim 11, wherein, after the step of presenting, if a new potential causal event is received whilst the timer is running which has the same significance as the event presented in the presenting step, the method further comprises the step of presenting the new event in the event list.

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16. A method as claimed in claim 11, wherein the events further include concluding events which may represent the conclusion or resolution of a device condition indicated in the previously received potential causal event, the method further comprising:

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after the step of presenting, if a new event is received whilst the timer is running which is a concluding event, considering whether the new event is an event that concludes a presented potential causal event, and if so, presenting the new event in the event list.

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17. A method as claimed in claim 16, wherein the concluding events include:  
events generated as a result of a configuration message indicating that configuration of the device has finished which conclude events generated as a result of a configuration message indicating that configuration of the device has started, and  
events generated in response to the device starting to respond again to IP Ping  
30 which conclude events generated through failure of the device to respond to IP Ping.

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18. A method as claimed in claim 11, wherein, when the timer expires, the method restarts and presents the first received event in the event list.

19. A method as claimed in claim 18, wherein, prior to presenting the first received event, the method comprises considering the type of event, and, if the event is a potential causal event, starting a timer prior to presenting the event in the event list.

20. A method for reducing a number of events presented in an event list to a user by a network management system, which events are generated by the network management system during the monitoring of a network and may be due to rebooting of a device on the network, the method comprising:

receiving an event relating to a device;

determining whether the most significant event relating to the device that already appears in the event list is less significant than the received event, and

if so, replacing the less significant event with the received event in the event list for presentation to the user.

21. A method as claimed in claim 20, wherein the events are assigned a priority value according to the type of event, the priority value indicative of the relative significance of the event, and the step of determining comprises comparing the priority value of the received event with the priority value of existing events in the event list to determine whether a more significant event already appears in the event list.

22. A method as claimed in claim 21, wherein the step of comparing comprises comparing the priority value of the received event with the priority values of existing events in the event list which were generated in an immediately preceding time period.

23. A method as claimed in claim 21, wherein the priority value of the most significant event in the event list is stored in memory, and the step of comparing

comprises comparing the priority value of the received event with the priority value in memory.

24. A method for reducing a number of events presented in an event list to a user by a network management system, which events are generated by the network management system during the monitoring of a network and may be due to rebooting of a device on the network, the method comprising:

receiving an event relating to a device;

determining whether the most significant event relating to the device that already appears in the event list is less significant than the received event, and

if so, removing from the event list all events relating to the device that already appear in the event list, and adding the received event to the event list for presentation to the user.

25. A method as claimed in claim 24, wherein the step of determining considers event relating to the device generated in a preceding predetermined time period, and the step of removing removes all events relating to the device generated in the preceding predetermined time period.

26. A computer readable medium including a computer program for carrying out the method as defined in claim 1.

27. A computer readable medium including a computer program for reducing a number of events presented in an event list to a user by a network management system, which events are generated by the network management system during the monitoring of a network and may be due to rebooting of a device on the network, the program comprising:

a program step for receiving an event relating to a device;

a program step for determining whether a more significant event already appears in the event list relating to the device, and

a program step for preventing the received event from being presented in the event list to the user if the program step for determining determines that a more significant event already appears in the event list.

- 5        28. A network management system for monitoring a network and generating events, the system for reducing a number of generated events presented in an event list to a user, which events may be due to rebooting of a device on the network, the system comprising:
- 10      a processor for determining if a received event is more significant than an event already appearing in the event list, and if so, the processor preventing the event from appearing in the event list.
- 15      29. A network management system as claimed in claim 28, wherein the events are assigned a priority value according to the type of event, the priority value indicative of the relative significance of the event, and wherein the processor compares the priority value of the received event with the priority value of existing events in the event list to determine whether a more significant event already appears in the event list.
- 20      30. A network management system as claimed in claim 29, further comprising memory for storing the priority value of the most significant event in the event list, wherein the processor compares the priority value of the received event with the priority value in memory to determine whether a more significant event already appears in the event list.